

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Hideo IHARA**

Serial No.: **Not Yet Assigned**
(PCT/JP00/01669)

Filed: **September 26, 2001**

For: **SELECTIVE REDUCTION TYPE HIGH TEMPERATURE SUPERCONDUCTOR
AND METHODS OF MAKING THE SAME**

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

September 26, 2001

Sir:

Prior to the calculation of the filing fees of the above application, please amend the application as follows:

IN THE SPECIFICATION:

Please replace the paragraph beginning at page 10, line 10, with the following rewritten paragraph:

A selective reduction method of the present invention is a method whereby polyvalent, reducible ions (e.g., Tl ion) substituted for a portion of Cu ions in the charge supply layers of a high temperature superconductor are reduced (their ionic valence is reduced) by decreasing the oxygen content in the high temperature superconductor (e.g., by heat treatment in a reducing atmosphere).

It is by this reduction of reducible substituted ions that the electronic and band structures of a Cu-oxide high temperature superconductor vary and a mechanism is revealed that permits doping with positive holes. It should also be noted at this point that term "selective reduction type high temperature superconductor", as used herein, of the present invention is intended to refer to a high

#3a
NEAL

al